

Official



In the claims:

Please cancel the currently pending claims without prejudice or disclaimer to the subject matter contained therein, and replace them with claims 170-320 that are numbered consecutively.

5           --170. A data processing system for monitoring advertisements watched by a subscriber, said data processing system comprising:

a storage medium;

means for monitoring subscriber activities, wherein the subscriber activities include volume levels;

10           means for storing the subscriber activities;

means for retrieving advertisement related information, wherein the advertisement related information contains descriptive fields corresponding to an advertisement;

means for determining the extent to which the advertisement is viewed by the subscriber; and

15           means for storing the descriptive fields and said determination of the extent to which the advertisement is viewed by the subscriber.

171. A data processing system for monitoring advertisements watched by a subscriber, said data processing system comprising:

20           means for monitoring subscriber activities;

means for storing the subscriber activities;

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means for retrieving advertisement related information, wherein the advertisement related information contains descriptive fields corresponding to an advertisement;

means for determining the extent to which the advertisement is viewed by the subscriber;

5 means for storing the descriptive fields and said determination of the extent to which the advertisement is viewed by the subscriber;

means for determining a subscriber product interests profile; and

means for storing said subscriber products interests profile.

172. A data processing system for monitoring advertisements watched by a subscriber,  
10 said data processing system comprising:

a storage medium;

means for monitoring subscriber activities;

means for storing the subscriber activities;

15 means for retrieving advertisement related information, wherein the advertisement related information contains descriptive fields corresponding to an advertisement and said means for retrieving advertisement related information comprises means for context mining of textual information associated with the advertisement;

means for determining the extent to which the advertisement is viewed by the subscriber;  
and

20 means for storing the descriptive fields and said determination of the extent to which the advertisement is viewed by the subscriber.

173. The system described in claim 172, wherein said textual information is text derived from closed-captioning data associated with said advertisement.

5 174. The system described in claim 173, wherein said text derived from closed-captioning data associated with said advertisement includes a product name field.

175. The system described in claim 172, wherein said text derived from closed-captioning data associated with said advertisement includes a product brand field.

10 176. A client-server based data processing system for monitoring advertisements watched by a subscriber, said client-server based data processing system comprising:

first computer processor means at a client side for receiving and displaying advertisements wherein said first computer means is capable of transmitting channel change requests;

15 second computer processor means at a server side for receiving said channel change requests and for processing data;

second storage means associated with second computer processor means for storing data on a storage medium;

first means at said server side for monitoring subscriber activity wherein said first means for monitoring subscriber activity includes receiving means for receiving subscriber channel change requests, recording means for storing subscriber channel change requests;

second means at said server side for retrieving advertisement related information wherein  
5 said advertisement related information contains descriptive fields corresponding to an advertisement;

third means at said server side for processing information wherein said third means includes means for determining the extent to which an advertisement is viewed by said subscriber; and

10 fourth means at said server side for storing said descriptive fields and said determination of the extent to which said advertisement is viewed by said subscriber.

177. The system described in claim 176, further comprising:

fifth means for determining a subscriber product interests profile; and

15 sixth means for storing said subscriber product interests profile.

178. The system described in claim 176, wherein said second means for retrieving advertisement related information further comprises a means for context mining of textual information associated with said selected source material.

179. The system described in claim 178, wherein said textual information is text derived from closed-captioning data associated with said advertisement.

180. The system described in claim 179, wherein said text derived from closed-captioning data associated with said advertisement includes a product name field.

181. The system described in claim 179, wherein said text derived from closed-captioning data associated with said advertisement includes a product brand field.

182. A data processing system for generating a subscriber profile vector, said data processing system comprising:

a storage medium;

means for monitoring subscriber activities including selected source material and volume levels, wherein the volume levels correspond to subscriber selection volume levels;

means for storing subscriber selection data, wherein the subscriber selection data corresponds to the selected source material;

means for retrieving source related information, wherein the source related information contains descriptive fields corresponding to the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector; and

means for storing the subscriber profile vector.

183. A data processing system for generating a subscriber profile vector, said data processing system comprising:

a storage medium;

5 means for monitoring subscriber activities including selected source material;

means for storing subscriber selection data, wherein the subscriber selection data corresponds to the selected source material;

means for retrieving source related information, wherein the source related information contains descriptive fields corresponding to the selected source material;

10 means for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector, wherein the subscriber profile vector contains household demographic data indicating probabilistic measurements of household demographics; and  
means for storing the subscriber profile vector.

15 184. A data processing system for generating a subscriber profile vector, said data processing system comprising:

a storage medium;

means for monitoring subscriber activities including selected source material;

means for storing subscriber selection data, wherein the subscriber selection data  
20 corresponds to the selected source material;

means for retrieving source related information, wherein the source related information contains descriptive fields corresponding to the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector, wherein the subscriber profile vector contains household  
5 program preference information indicating probabilistic measurements of household program interests; and

means for storing the subscriber profile vector.

185. A data processing system for generating a subscriber profile vector, said data  
10 processing system comprising:

a storage medium;

means for monitoring subscriber activities including selected source material;

means for storing subscriber selection data, wherein the subscriber selection data corresponds to the selected source material;

15 means for retrieving source related information, wherein the source related information contains descriptive fields corresponding to the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector, wherein the subscriber profile vector contains household  
product preference information indicating probabilistic measurements of household product

20 interests; and

means for storing the subscriber profile vector.

186. A data processing system for generating a subscriber profile vector, said data processing system comprising:

a storage medium;

5 means for monitoring subscriber activities including selected source material;

means for storing subscriber selection data, wherein the subscriber selection data corresponds to the selected source material;

means for retrieving source related information, wherein the source related information contains descriptive fields corresponding to the selected source material and said means for  
10 retrieving source related information comprises means for context mining of textual information associated with the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector; and

means for storing the subscriber profile vector.

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187. The system described in claim 186, wherein said textual information is text derived from closed-captioning data associated with said selected source material.

188. The system described in claim 186, wherein the textual information is text derived  
20 from an electronic program guide.



189. A data processing system for generating a subscriber profile vector, said data processing system comprising:

a storage medium;

means for monitoring subscriber activities including selected source material;

5 means for storing subscriber selection data, wherein the subscriber selection data corresponds to the selected source material;

means for retrieving source related information, wherein the source related information contains descriptive fields corresponding to the selected source material;

10 means for processing the subscriber selection data over a viewing session with respect to the descriptive fields to form the subscriber profile vector, wherein the subscriber profile vector corresponds to the viewing session; and

means for storing the subscriber profile vector.

190. A data processing system for generating a subscriber profile vector, said data processing system comprising:

a storage medium;

means for monitoring subscriber activities including selected source material;

means for storing subscriber selection data, wherein the subscriber selection data corresponds to the selected source material;

20 means for retrieving source related information, wherein the source related information contains descriptive fields corresponding to the selected source material;

means for processing the subscriber selection data over multiple viewing sessions with respect to the descriptive fields to form the subscriber profile vector, wherein the subscriber profile vector corresponds to an average value over the multiple viewing sessions; and

means for storing the subscriber profile vector.

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191. A data processing system for generating a subscriber profile vector, said data processing system comprising:

- (a) computer processor means for processing data;
- (b) storage means for storing data on a storage medium;
- 10 (c) first means for monitoring subscriber activity wherein said first means includes recording means for storing subscriber selection data wherein said subscriber selection data corresponds to selected source material;
- (d) second means for retrieving source related information wherein said source related information contains descriptive fields corresponding to said selected source material;
- 15 (e) third means for generating a program characteristics vector based on said source related information;
- (f) fourth means for storing a set of heuristic rules;
- (g) fifth means for processing information wherein said fifth means includes means for processing said subscriber selection data with respect to said program characteristics vector
- 20 and said set of heuristic rules to form said subscriber profile vector; and
- (h) sixth means for storing said subscriber profile vector.

192. The system described in claim 191, wherein said first means for monitoring subscriber activity further comprises means for monitoring time durations wherein said time durations correspond to viewing times of said selected source material.

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193. The system described in claim 191, wherein said first means for monitoring subscriber activity further comprises means for monitoring volume levels wherein said volume levels correspond to subscriber selection volume levels.

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194. The system described in claim 191, wherein said subscriber profile vector contains household demographic data indicating probabilistic measurements of household demographics.

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195. The system described in claim 191, wherein said subscriber profile vector contains a household session interest profile indicating probabilistic measurements of household interests.

196. A data processing system for generating a household demographic characteristics vector, said data processing system comprising:

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- (a) computer processor means for processing data;
- (b) storage means for storing data on a storage medium;

(c) first means for monitoring subscriber activity wherein said first means includes recording means for storing subscriber selection data wherein said subscriber selection data corresponds to selected source material;

(d) second means for generating household viewing habits information wherein said household viewing habits information is generated from said subscriber selection data;

(e) third means for storing a set of heuristic rules;

(f) fourth means for processing information wherein said fourth means includes means for processing said subscriber selection data with respect to said set of heuristic rules to form said household demographic characteristics vector; and

(g) fifth means for storing said household demographic characteristics vector.

197. The system described in claim 196, wherein said fourth means for processing information processes information over a viewing session and wherein said household demographic characteristics vector corresponds to said viewing session.

198. The system described in claim 196, wherein said fourth means for processing information processes information over a period of multiple viewing sessions wherein said household demographic characteristics vector corresponds to an average value over said multiple viewing sessions.

199. A data processing system for generating a subscriber profile vector in a client-server based architecture, said data processing system comprising:

first computer processor means, at a client side, for requesting and displaying source information wherein said first computer means transmits a request for source material and

5 receives and displays the source material;

second computer processor means, at a server side, for processing data;

storage means, associated with the second computer processor means, for storing data on a storage medium;

means, at said server side, for monitoring subscriber activity including

10 means for receiving subscriber requests for the source material,

means for monitoring volume levels wherein the volume levels correspond to subscriber selection volume levels, and

means for storing subscriber selection data wherein the subscriber selection data corresponds to a record of requests for the source material;

15 means, at said server side, for retrieving source related information wherein the source related information contains descriptive fields corresponding to the source material;

means, at said server side, for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector; and

means, at said server side, for storing the subscriber profile vector.

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200. A data processing system for generating a subscriber profile vector in a client-server based architecture, said data processing system comprising:

first computer processor means, at a client side, for requesting and displaying source information wherein said first computer means transmits a request for source material and

5 receives and displays the source material;

second computer processor means, at a server side, for processing data;

storage means, associated with the second computer processor means, for storing data on a storage medium;

means, at said server side, for monitoring subscriber activity including

10 means for receiving subscriber requests for the source material, and

means for storing subscriber selection data wherein the subscriber selection data corresponds to a record of requests for the source material;

means, at said server side, for retrieving source related information wherein the source related information contains descriptive fields corresponding to the source material;

15 means, at said server side, for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector, wherein the subscriber profile vector contains household demographic data indicating probabilistic measurements of household demographics; and

means, at said server side, for storing the subscriber profile vector.

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201. A data processing system for generating a subscriber profile vector in a client-server based architecture, said data processing system comprising:

first computer processor means, at a client side, for requesting and displaying source information wherein said first computer means transmits a request for source material and

5 receives and displays the source material;

second computer processor means, at a server side, for processing data;

storage means, associated with the second computer processor means, for storing data on a storage medium;

means, at said server side, for monitoring subscriber activity including

10 means for receiving subscriber requests for the source material, and

means for storing subscriber selection data wherein the subscriber selection data corresponds to a record of requests for the source material;

means, at said server side, for retrieving source related information wherein the source related information contains descriptive fields corresponding to the source material;

15 means, at said server side, for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector, wherein the subscriber profile vector contains household program preference information indicating probabilistic measurements of household program interests; and

means, at said server side, for storing the subscriber profile vector.

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202. A data processing system for generating a subscriber profile vector in a client-server based architecture, said data processing system comprising:

first computer processor means, at a client side, for requesting and displaying source information wherein said first computer means transmits a request for source material and

5 receives and displays the source material;

second computer processor means, at a server side, for processing data;

storage means, associated with the second computer processor means, for storing data on a storage medium;

means, at said server side, for monitoring subscriber activity including

10 means for receiving subscriber requests for the source material, and

means for storing subscriber selection data wherein the subscriber selection data corresponds to a record of requests for the source material;

means, at said server side, for retrieving source related information wherein the source related information contains descriptive fields corresponding to the source material;

15 means, at said server side, for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector, wherein the subscriber profile vector contains household product preference information indicating probabilistic measurements of household product interests; and

means, at said server side, for storing the subscriber profile vector.

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203. A data processing system for generating a subscriber profile vector in a client-server based architecture, said data processing system comprising:

first computer processor means, at a client side, for requesting and displaying source information wherein said first computer means transmits a request for source material and

5 receives and displays the source material;

second computer processor means, at a server side, for processing data;

storage means, associated with the second computer processor means, for storing data on a storage medium;

means, at said server side, for monitoring subscriber activity including

10 means for receiving subscriber requests for the source material, and

means for storing subscriber selection data wherein the subscriber selection data corresponds to a record of requests for the source material;

means, at said server side, for retrieving source related information wherein the source related information contains descriptive fields corresponding to the source material, said means

15 for retrieving comprises means for context mining of textual information associated with the selected source material;

means, at said server side, for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector, and

means, at said server side, for storing the subscriber profile vector.

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204. The system described in claim 203, wherein said textual information is text derived from closed-captioning data associated with said selected source material.

205. A data processing system for generating a subscriber profile vector in a client-server based architecture, said data processing system comprising:

first computer processor means, at a client side, for requesting and displaying source information wherein said first computer means transmits a request for source material and receives and displays the source material;

second computer processor means, at a server side, for processing data;

storage means, associated with the second computer processor means, for storing data on a storage medium;

means, at said server side, for monitoring subscriber activity including

means for receiving subscriber requests for the source material, and

means for storing subscriber selection data wherein the subscriber selection data corresponds to a record of requests for the source material;

means, at said server side, for retrieving source related information wherein the source related information contains descriptive fields corresponding to the source material, said means for retrieving comprises means for retrieving information associated with the selected source material from an electronic program guide;

means, at said server side, for processing the subscriber selection data with respect to the descriptive fields to form the subscriber profile vector, and

means, at said server side, for storing the subscriber profile vector.

206. A data processing system for generating a subscriber profile vector in a client-server based architecture, said data processing system comprising:

5 first computer processor means, at a client side, for requesting and displaying source information wherein said first computer means transmits a request for source material and receives and displays the source material;

second computer processor means, at a server side, for processing data;

10 storage means, associated with the second computer processor means, for storing data on a storage medium;

means, at said server side, for monitoring subscriber activity including

means for receiving subscriber requests for the source material, and

means for storing subscriber selection data wherein the subscriber selection data corresponds to a record of requests for the source material;

15 means, at said server side, for retrieving source related information wherein the source related information contains descriptive fields corresponding to the source material;

means, at said server side, for processing the subscriber selection data over a viewing session with respect to the descriptive fields, to form the subscriber profile, wherein the subscriber profile vector corresponds to the viewing session; and

20 means, at said server side, for storing the subscriber profile vector.

207. A data processing system for generating a subscriber profile vector in a client-server based architecture, said data processing system comprising:

first computer processor means, at a client side, for requesting and displaying source information wherein said first computer means transmits a request for source material and

5 receives and displays the source material;

second computer processor means, at a server side, for processing data;

storage means, associated with the second computer processor means, for storing data on a storage medium;

means, at said server side, for monitoring subscriber activity including

10 means for receiving subscriber requests for the source material, and

means for storing subscriber selection data wherein the subscriber selection data corresponds to a record of requests for the source material;

means, at said server side, for retrieving source related information wherein the source related information contains descriptive fields corresponding to the source material;

15 means, at said server side, for processing the subscriber selection data over multiple viewing sessions with respect to the descriptive fields to form the subscriber profile, wherein the subscriber profile vector corresponds to an average value over the multiple viewing sessions; and

means, at said server side, for storing the subscriber profile vector.

20 208. A data processing system for generating a subscriber profile vector in a client-server based architecture, said data processing system comprising:

(a) first computer processor means at a client side for requesting and displaying source information wherein said first computer means transmits a request for source material and receives and displays said source material;

(b) second computer processor means at a server side for processing data;

5 (c) second storage means associated with second computer processor means for storing data on a storage medium;

(d) first means at said server side for monitoring subscriber activity wherein said first means for monitoring subscriber activity includes receiving means for receiving subscriber requests for said source material, recording means for storing subscriber selection data wherein  
10 said subscriber selection data corresponds to a record of requests for said source material;

(e) second means at said server side for retrieving source related information wherein said source related information contains descriptive fields corresponding to said source material;

(f) third means at said server side for generating a program characteristics vector based on said source related information;

15 (g) fourth means at said server side for storing a set of heuristic rules;

(h) fifth means at said server side for processing information wherein said fifth means includes means for processing said subscriber selection data with respect to said program characteristics vector and said set of heuristic rules to form said subscriber profile vector; and

(i) sixth means at said server side for storing said subscriber profile vector.

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209. The system described in claim 208, wherein said first means for monitoring subscriber activity further comprises means for monitoring time durations wherein said time durations correspond to viewing times of said selected source material.

5 210. The system described in claim 208, wherein said first means for monitoring subscriber activity further comprises means for monitoring volume levels wherein said volume levels correspond to subscriber selection volume levels.

10 211. The system described in claim 208, wherein said subscriber profile vector contains household demographic data indicating probabilistic measurements of household demographics.

15 212. The system described in claim 208, wherein said subscriber profile vector contains a household session interest profile indicating probabilistic measurements of household interests.

213. A data processing system for generating a household demographic characteristics vector in a client-server based architecture, said data processing system comprising:

(a) first computer processor means at a client side for requesting and displaying  
20 source information wherein said first computer means transmits a request for source material and receives and displays said source material;

(b) second computer processor means at a server side for processing data;

(c) first means at said server side for monitoring subscriber activity wherein said first means includes recording means for storing subscriber selection data wherein said subscriber selection data corresponds to selected source material;

5 (d) second means at said client side for generating household viewing habits information wherein said household viewing habits information is generated from said subscriber selection data;

(e) third means at said server side for storing a set of heuristic rules;

(f) fourth means at said server side for processing information wherein said fourth  
10 means includes means for processing said subscriber selection data with respect to said set of heuristic rules to form said household demographic characteristics vector; and

(g) fifth means at said server side for storing said household demographic characteristics vector.

15 214. The system described in claim 213, wherein said fourth means for processing information processes information over a viewing session and wherein said household demographic characteristics vector corresponds to said viewing session.

20 215. The system described in claim 213, wherein said fourth means for processing information processes information over a period of multiple viewing sessions wherein said household demographic characteristics vector corresponds to an average value over said multiple viewing sessions.

216. A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

monitoring user viewing activities including channel change signals;

5 collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile.

217. The method of claim 216, wherein the source material includes analog video,  
10 Motion Picture Expert Group, digital video, Hypertext Markup Language material, and other multimedia source material supplied to the user by a provider of the television programming.

218. A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

15 monitoring user viewing activities including volume control commands initiated by the user;

collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile.

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219. The method of claim 218, wherein said monitoring user viewing activities includes monitoring program selection commands initiated by the user.

220. A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

monitoring user viewing activities including address requests made by the user requesting delivery of programming from the provider of the television programming;

collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile.

221. A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

monitoring user viewing activities including record signals initiated by the user;

collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile.

222. The method of claim 216, wherein said collecting subscriber selection data includes extracting source related text from the source material.

223. The method of claim 222, wherein the source related text includes one or more descriptive fields.

224. The method of claim 222, wherein the source material is an electronic program  
5 guide and the source related text is extracted from the electronic program guide.

225. The method of claim 222, wherein the source material is at least one HTML file related to the source material and the source related text is extracted from the at least one HTML file.

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226. The method of claim 222, wherein the source material includes close captioning information and the source related text is extracted from the close captioning information.

227. The method of claim 216, wherein said monitoring includes monitoring time  
15 durations, wherein the time durations correspond to viewing times of selected source material.

228. A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

monitoring user viewing activities;

20 collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile, wherein said processing the subscriber selection data includes generating one or more program characteristics vectors based on the subscriber selection data.

5           229.   The method of claim 228, wherein the program characteristics vectors include one or more values characterizing the source material.

230.   A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

10           monitoring user viewing activities;

collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile, wherein said processing the subscriber selection data includes generating a n-dimensional program

15           characteristics matrix comprising one or more program characteristics vectors.

231.   A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

monitoring user viewing activities;

20           collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile, wherein said processing the subscriber selection data includes processing subscriber selection data based on a pre-determined set of heuristic rules.

5           232.   The method of claim 231, wherein the heuristic rules include logical forms.

233.   The method of claim 231, wherein the heuristic rules include conditional probabilities.

10           234.   The method of claim 216, wherein the subscriber profile is based on the users interests.

235.   A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

15           monitoring user viewing activities;

collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile, wherein the user belongs to a household and the subscriber profile is based on the interests of the household.

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236. A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

monitoring user viewing activities;

collecting subscriber selection data based on source material selected by the user over a

5 predetermined period of time; and

processing the subscriber selection data to create a subscriber profile, wherein the subscriber profile is a demographic profile indicating the probable age, income, gender, and other demographics of the user.

10 237. The method of claim 236, wherein the predetermined period of time for collecting subscriber selection data is a viewing session, and the demographic profile is for the user during the viewing session.

238. The method of claim 236, wherein the predetermined period of time for collecting  
15 subscriber selection data is a plurality of viewing sessions, and the demographic profile is an average demographic profile for the user, wherein the average demographic profile is an average for the plurality of viewing sessions.

239. A method for generating a subscriber profile for a subscribed user of television  
20 programming, the method comprising:

monitoring user viewing activities;

collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile, wherein the subscriber profile is a program preference profile indicating the type of programming of interest to the user.

240. A method for generating a subscriber profile for a subscribed user of television programming, the method comprising:

monitoring user viewing activities;

collecting subscriber selection data based on source material selected by the user over a predetermined period of time; and

processing the subscriber selection data to create a subscriber profile, wherein the subscriber profile is a product preference profile for the user.

241. The method of claim 236, wherein the user belongs to a household and the subscriber profile includes probabilistic measurements of household demographics.

242. The method of claim 239, wherein the user belongs to a household and the subscriber profile includes probabilistic measurements of household program interests.

243. The method of claim 240, wherein the user belongs to a household and the subscriber profile includes probabilistic measurements of household product interests.

244. The method of claim 216, wherein the subscriber belongs to a household, the  
5 predetermined period of time for collecting subscriber selection data is a viewing session, and the subscriber profile is a demographic profile for the household during the viewing session.

245. The method of claim 216, wherein the subscriber belongs to a household, the predetermined period of time for collecting subscriber selection data is a plurality of viewing  
10 sessions, and the subscriber profile is an average demographic profile for the household, wherein the average demographic profile is an average for the plurality of viewing sessions.

246. The method of claim 216, wherein the subscriber profile is controlled by the user.

15 247. The method of claim 216, wherein the subscriber profile is analyzed by a third party for the purposes of marketing and advertising.

248. The method of claim 216, wherein access to the subscriber profile is limited to a select number of other parties.

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249. The method of claim 216, further comprising analyzing the subscriber profile to estimate user viewing habits.

250. A data processing system for generating a subscriber profile for a subscribed user  
5 of television programming, the data processing system comprising:

means for processing data;

a storage medium;

means for monitoring subscriber activity including

means for storing subscriber selection data, wherein the subscriber selection data

10 corresponds to source material selected by a subscriber, and

means for monitoring volume control commands initiated by the subscriber;

means for retrieving source related information which includes descriptive fields  
corresponding to the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to  
15 generate the subscriber profile; and

means for storing the subscriber profile.

251. The system described in claim 250, wherein the means for monitoring subscriber  
activity further includes means for monitoring viewing times of the selected source material.

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252. A data processing system for generating a subscriber profile for a subscribed user of television programming, the data processing system comprising:

means for storing subscriber selection data, wherein the subscriber selection data corresponds to source material selected by a subscriber;

5 means for retrieving source related information which includes descriptive fields corresponding to the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile; and

10 means for storing the subscriber profile, wherein the subscriber profile includes probabilistic measurements of household demographics.

253. A data processing system for generating a subscriber profile for a subscribed user of television programming, the data processing system comprising:

15 means for storing subscriber selection data, wherein the subscriber selection data corresponds to source material selected by a subscriber;

means for retrieving source related information which includes descriptive fields corresponding to the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile; and

20 means for storing the subscriber profile, wherein the subscriber profile includes probabilistic measurements of household program interests.

254. A data processing system for generating a subscriber profile for a subscribed user of television programming, the data processing system comprising:

means for storing subscriber selection data, wherein the subscriber selection data

5 corresponds to source material selected by a subscriber;

means for retrieving source related information which includes descriptive fields corresponding to the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile; and

10 means for storing the subscriber profile, wherein the subscriber profile includes probabilistic measurements of household product interests.

255. The system described in claim 250, wherein the means for retrieving source related information includes means for context mining of textual information associated with the  
15 selected source material.

256. The system described in claim 255, wherein the textual information is text derived from closed-captioning data.

257. The system described in claim 250, wherein the means for retrieving source related information includes means for retrieving information associated with the selected source material from an electronic program guide.

5 258. A data processing system for generating a subscriber profile for a subscribed user of television programming, the data processing system comprising:

means for storing subscriber selection data, wherein the subscriber selection data corresponds to source material selected by a subscriber;

10 means for retrieving source related information which includes descriptive fields corresponding to the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile, wherein the means for processing the subscriber selection data processes the data over a viewing session so that the subscriber profile corresponds to the viewing session; and

15 means for storing the subscriber profile.

259. A data processing system for generating a subscriber profile for a subscribed user of television programming, the data processing system comprising:

20 means for storing subscriber selection data, wherein the subscriber selection data corresponds to source material selected by a subscriber;

means for retrieving source related information which includes descriptive fields corresponding to the selected source material;

means for processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile, wherein the means for processing the subscriber selection data includes processing the subscriber selection data over multiple viewing sessions to generate an average subscriber profile which is an average of the subscriber profiles for each viewing session; and

means for storing the subscriber profile.

10 260. A data processing system for generating a subscriber profile vector for a subscribed user of television programming, the data processing system comprising:

means for processing data;

a storage medium;

15 means for monitoring subscriber activity including means for storing subscriber selection data, wherein the subscriber selection data corresponds to source material selected by the user;

means for retrieving source related information including descriptive fields corresponding to the selected source material;

means for generating a program characteristics vector based on the source related information;

20 means for storing a set of heuristic rules;

means for processing the subscriber selection data with respect to the program characteristics vector and the set of heuristic rules to generate the subscriber profile vector; and  
means for storing the subscriber profile vector.

5        261. The system described in claim 260, wherein the means for monitoring subscriber activity further includes means for monitoring viewing times of the selected source material.

262. The system described in claim 260, wherein the means for monitoring subscriber activity further includes means for monitoring subscriber selection volume levels.

10

263. The system described in claim 260, wherein the subscriber profile vector includes probabilistic measurements of household demographics.

15        264. The system described in claim 260, wherein the subscriber profile includes probabilistic measurements of household interests.

265. A data processing system for generating a household demographic characteristics vector, the data processing system comprising:

means for processing data;

20        a storage medium;

means for monitoring subscriber activity including means for storing subscriber selection data, wherein the subscriber selection data corresponds to selected source material;

means for generating household viewing habits from the subscriber selection data;

means for storing a set of heuristic rules;

5 means for processing the subscriber selection data with respect to the set of heuristic rules to generate the household demographic characteristics vector; and

means for storing the household demographic characteristics vector.

266. The system described in claim 265, wherein the means for processing the  
10 subscriber selection data includes processing information over a viewing session, and the household demographic characteristics vector corresponds to the viewing session.

267. The system described in claim 265, wherein the means for processing the  
subscriber selection data includes processing the subscriber selection data over multiple viewing  
15 sessions to generate an average household demographic characteristics vector which is an average of the household demographic characteristic vectors for each viewing session.

268. An interactive television system comprising  
an input device for allowing a subscriber to select source material to view;  
20 a monitor for displaying the selected source material; and

a profile generator for generating a profile of the subscriber based on source material viewed, wherein the profile generator includes:

means for monitoring subscriber activity;

means for retrieving source related information corresponding to the selected source

5 material;

means for generating a content characteristics vector based on the source related information; and

means for generating a subscriber profile based on the subscriber activity, the content characteristics vector, and a set of heuristic rules.

10

269. An interactive television system comprising:

a input device for allowing a subscriber to select source material to view;

a monitor for displaying the selected source material; and

a profile generator for generating a profile of the subscriber based on source material

15 viewed, wherein the profile generator includes:

means for monitoring subscriber activity;

means for generating a viewing habits profile from the subscriber activity; and

means for generating a subscriber profile based on the viewing habits profile and a set of heuristic rules.

20

270. A method for monitoring advertisements watched by a subscriber, the method comprising:

monitoring subscriber advertising viewing activities;

retrieving advertising related information including descriptive fields corresponding to an

5 advertisement;

determining the extent to which the advertisement is viewed by the subscriber;

recording the determination; and

generating a subscriber profile based on at least one recorded determination, wherein the subscriber profile is a subscriber product interests profile.

10

271. A method for monitoring advertisements watched by a subscriber, the method comprising:

monitoring subscriber advertising viewing activities including volume control commands initiated by the subscriber;

15 retrieving advertising related information including descriptive fields corresponding to an advertisement;

determining the extent to which the advertisement is viewed by the subscriber; and

recording the determination.

20 272. A method for monitoring advertisements watched by a subscriber, the method comprising:



monitoring subscriber advertising viewing activities including channel change signals initiated by the subscriber;

retrieving advertising related information including descriptive fields corresponding to an advertisement;

5 determining the extent to which the advertisement is viewed by the subscriber; and recording the determination.

273. The method of claim 272, wherein said retrieving advertising related information includes extracting source related text from source material for the advertisement.

10

274. The method of claim 273, wherein the source related text includes at least one descriptive field.

275. The method of claim 273, wherein the source related text is extracted from an  
15 electronic program guide.

276. A method for monitoring advertisements watched by a subscriber, the method comprising:

monitoring subscriber advertising viewing activities;

20 retrieving advertising related information including descriptive fields corresponding to an advertisement, wherein said retrieving advertising related information includes extracting source

related text from source material for the advertisement, and the source related text is extracted from at least one HTML file related to the source material;

determining the extent to which the advertisement is viewed by the subscriber;

recording the determination.

5

277. The method of claim 273, wherein the source related text is extracted from the closed-captioning information.

278. The method of claim 273, wherein the source related text extracted from source material includes a product name field.

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279. The method of claim 273, wherein the source related text extracted from source material includes a product brand field.

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280. The method of claim 273, further comprising generating at least one advertising characteristic based on the extracted source related text.

281. The method of claim 273, further comprising generating at least one advertising characteristic based on at least one value characterizing the source material

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282. The method of claim 280, wherein the at least one advertising characteristic includes an n-dimensional characteristics matrix.

283. A data processing system for monitoring advertisements watched by a subscriber,  
5 the data processing system comprising:

means for monitoring subscriber activity including subscriber selection volume levels;

means for storing subscriber selections;

means for retrieving advertisement related information including descriptive fields  
corresponding to an advertisement;

10 means for processing information including means for determining the extent to which an  
advertisement is viewed by the subscriber; and

means for storing the descriptive fields and the determination of the extent to which the  
advertisement is viewed by the subscriber.

15 284. A data processing system for monitoring advertisements watched by a subscriber,  
the data processing system comprising:

means for monitoring subscriber activity;

means for storing subscriber selections;

means for retrieving advertisement related information including descriptive fields  
20 corresponding to an advertisement;

means for processing information including means for determining the extent to which an advertisement is viewed by the subscriber;

means for storing the descriptive fields and the determination of the extent to which the advertisement is viewed by the subscriber;

- 5 means for determining a subscriber product interests profile; and  
means for storing the subscriber product interests profile.

285. The system described in claim 283, wherein the means for retrieving advertisement related information includes means for context mining of textual information  
10 associated with source material of the advertisement.

286. The system described in claim 285, wherein the textual information is text derived from closed-captioning data.

15 287. The system described in claim 285, wherein the textual information includes a product name field.

288. The system described in claim 285, wherein the textual information includes a product brand field.

20

289. A client-server based data processing system for monitoring advertisements watched by a subscriber, the client-server based data processing system comprising:

means for transmitting subscriber channel change requests;

means for monitoring subscriber activity including:

5 means for receiving subscriber channel change requests;

means for storing the subscriber channel change requests;

means for retrieving advertisement related information, wherein the advertisement related information contains descriptive fields corresponding to an advertisement;

means for determining the extent to which an advertisement is viewed by the subscriber;

10 and

means for storing the descriptive fields and the determination of the extent to which the advertisement is viewed by the subscriber.

290. The system described in claim 289, further comprising:

15 means for determining a subscriber product interests profile; and

means for storing the subscriber product interests profile.

291. An interactive television system comprising:

an input device for allowing a subscriber to select source material to view;

20 a monitor for displaying the selected source material;

an advertisement monitoring device; and

a profile generator for generating a subscriber interest profile based on advertisements that the subscriber views.

5 292. The system of claim 291, wherein the advertisement monitoring device includes:

means for monitoring subscriber activity including subscriber selections;

means for retrieving advertisement related information corresponding to an advertisement; and

means for determining the extent to which an advertisement is viewed by the subscriber.

10

293. In a client-server based architecture having a client side and a server side, a method for generating a subscriber profile vector for a subscriber, the method comprising:

monitoring subscriber viewing activities including capturing requests for source material initiated by the client side, and monitoring volume levels corresponding to the subscriber

15 selection volumes;

generating subscriber selection data, wherein the subscriber selection data corresponds to a record of requests for the source material;

retrieving source related information, wherein the source related information includes descriptive fields corresponding to the source material;

20 processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile vector; and

storing the subscriber profile vector.

294. The method of claim 293, wherein said monitoring subscriber viewing activities further includes monitoring time durations corresponding to the viewing times of the requested  
5 source material.

295. In a client-server based architecture having a client side and a server side, a method for generating a subscriber profile vector for a subscriber, the method comprising:

monitoring subscriber viewing activities including capturing requests for source material  
10 initiated by the client side;

generating subscriber selection data, wherein the subscriber selection data corresponds to a record of requests for the source material;

retrieving source related information, wherein the source related information includes descriptive fields corresponding to the source material;

15 processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile vector; and

storing the subscriber profile vector, wherein the subscriber profile vector includes household demographic data indicating probabilistic measurements of household demographics.

20 296. In a client-server based architecture having a client side and a server side, a method for generating a subscriber profile vector for a subscriber, the method comprising:

monitoring subscriber viewing activities including capturing requests for source material initiated by the client side;

generating subscriber selection data, wherein the subscriber selection data corresponds to a record of requests for the source material;

5 retrieving source related information, wherein the source related information includes descriptive fields corresponding to the source material;

processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile vector; and

10 storing the subscriber profile vector, wherein the subscriber profile vector includes household program preference information indicating probabilistic measurements of household program interests.

297. In a client-server based architecture having a client side and a server side, a method for generating a subscriber profile vector for a subscriber, the method comprising:

15 monitoring subscriber viewing activities including capturing requests for source material initiated by the client side;

generating subscriber selection data, wherein the subscriber selection data corresponds to a record of requests for the source material;

20 retrieving source related information, wherein the source related information includes descriptive fields corresponding to the source material;



processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile vector; and

storing the subscriber profile vector, wherein the subscriber profile vector includes household product preference information indicating probabilistic measurements of household product interests.

298. The method of claim 293, wherein said generating subscriber selection data includes context mining of textual information associated with the selected source material.

299. The method of claim 298, wherein the textual information includes text derived from closed-captioning data.

300. The method of claim 293, wherein said retrieving source related information includes retrieving source related information from an electronic program guide associated with the selected source material.

301. The method of claim 293, wherein said generating subscriber selection data includes generating subscriber selection data over a viewing session, and the subscriber profile vector corresponds to the viewing session.

302. The method described in claim 293, wherein said generating subscriber selection data includes generating subscriber selection data over multiple viewing sessions, and the subscriber profile vector corresponds to an average value for the multiple viewing sessions.

5 303. A data processing system for generating a subscriber profile vector in a client-server based architecture, the data processing system comprising:

means for transmitting a subscriber request for source material;

means for monitoring subscriber activity including

means for receiving the subscriber request for source material;

10 means for recording the requests for source material as subscriber selection data;

means for retrieving source related information, wherein the source related information includes descriptive fields corresponding to the source material;

means for generating a program characteristics vector based on the source related information;

15 means for storing a set of heuristic rules;

means for processing the subscriber selection data with respect to the program characteristics vector and the set of heuristic rules to generate the subscriber profile vector; and

means for storing the subscriber profile vector.

304. The system described in claim 303, wherein the means for monitoring subscriber activity further includes means for monitoring time durations, wherein the time durations correspond to viewing times of the requested source material.

5 305. The system described in claim 303, wherein the means for monitoring subscriber activity further includes means for monitoring volume levels, wherein the volume levels correspond to subscriber selection volume levels.

306. The system described in claim 303, wherein the subscriber profile vector includes  
10 household demographic data indicating probabilistic measurements of household demographics.

307. The system described in claim 303, wherein the subscriber profile vector includes a household session interest profile indicating probabilistic measurements of household interests.

15 308. A data processing system for generating a household demographic characteristics vector in a client-server based architecture, the data processing system comprising:

means for allowing a subscriber to request source material;

means for monitoring subscriber activity including means for storing subscriber selection data, wherein the subscriber selection data corresponds to requested source material;

20 means for generating household viewing habits information from the subscriber selection data;

means for storing a set of heuristic rules;

means for processing the subscriber selection data with respect to the set of heuristic rules to generate the household demographic characteristics vector; and

means for storing the household demographic characteristics vector.

5

309. The system described in claim 308, wherein the means for processing the subscriber selection data processes the subscriber selection data over a viewing session, and the generated household demographic characteristics vector corresponds to the viewing session.

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310. The system described in claim 308, wherein the means for processing the subscriber selection data processes the subscriber selection data over a period of multiple viewing sessions, and the generated household demographic characteristics vector corresponds to an average value for the multiple viewing sessions.

15

311. A data processing system for generating a subscriber profile vector in a client-server based architecture, the data processing system comprising:

means for selecting source material for a subscriber to view;

means for receiving the subscriber selections for source material;

means for recording the subscriber selections for source material, wherein a record of the

20

selections constitutes subscriber selection data;

means for retrieving source related information, wherein the source related information includes descriptive fields corresponding to the source material;

means for processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile vector; and

5 means for storing the subscriber profile vector, wherein the subscriber profile vector includes household demographic data indicating probabilistic measurements of household demographics.

312. A data processing system for generating a subscriber profile vector in a client-  
10 server based architecture, the data processing system comprising:

means for selecting source material for a subscriber to view;

means for receiving the subscriber selections for source material;

means for recording the subscriber selections for source material, wherein a record of the selections constitutes subscriber selection data;

15 means for retrieving source related information, wherein the source related information includes descriptive fields corresponding to the source material;

means for processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile vector; and

means for storing the subscriber profile vector, wherein the subscriber profile vector  
20 includes household program preference information indicating probabilistic measurements of household program interests.

313. A data processing system for generating a subscriber profile vector in a client-server based architecture, the data processing system comprising:

means for selecting source material for a subscriber to view;

5 means for receiving the subscriber selections for source material;

means for recording the subscriber selections for source material, wherein a record of the selections constitutes subscriber selection data;

means for retrieving source related information, wherein the source related information includes descriptive fields corresponding to the source material;

10 means for processing the subscriber selection data with respect to the descriptive fields to generate the subscriber profile vector; and

means for storing the subscriber profile vector, wherein the subscriber profile vector contains household product preference information indicating probabilistic measurements of household product interests.

15

314. The system described in claim 311, wherein the means for retrieving source related information includes means for context mining of textual information associated with the selected source material.

20 315. The system described in claim 314, wherein the textual information is text derived from closed-captioning data.

316. The system described in claim 311, wherein the means for retrieving source related information retrieves source related information from an electronic program guide associated with the selected source material.

5

317. The system described in claim 311, wherein the means for processing the subscriber selection data processes the subscriber selection data over a viewing session, and the generated household demographic characteristics vector corresponds to the viewing session.

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318. The system described in claim 311, wherein the means for processing the subscriber selection data processes the subscriber selection data over a period of multiple viewing sessions, and the generated household demographic characteristics vector corresponds to an average value for the multiple viewing sessions.

15

319. An Internet browsing system comprising:  
an input device for allowing a subscriber to select source material to view;  
a monitor for displaying the selected source material; and  
a profile generator for generating a profile of the subscriber based on source material viewed, wherein the profile generator includes:

20

means for tracking the subscriber selections for source material;  
means for the retrieving the source material;